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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|-----------------|----------------------|-------------------------|-------------------------|--|
| 09/919,281 | 07/31/2001 | Aaron M. Jungreis | ABTT-0214/B000070 | 4073 | |
| 23377 | 7590 04/16/2004 | | EXAM | INER | |
| WOODCOCK WASHBURN LLP ONE LIBERTY PLACE, 46TH FLOOR 1650 MARKET STREET | | | BERHANE, ADOLF D | | |
| | | | ART UNIT | PAPER NUMBER | |
| | PHIA, PA 19103 | | 2838 | | |
| | | | DATE MAILED: 04/16/2004 | DATE MAILED: 04/16/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|--|--|--|--|--|--|
| | 09/919,281 | JUNGREIS ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Adolf Berhane | 2838 | | | | |
| The MAILING DATE of this communication ap | pears on the cover sheet with the c | orrespondence address | | | | |
| Period for Reply | | 0) 50014 | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | |
| , , | s action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-49</u> is/are pending in the application | 1 | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-49</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/o | or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examin | er. | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the | | | | | | |
| Replacement drawing sheet(s) including the correct | | | | | | |
| 11) The oath or declaration is objected to by the E | xaminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign | n priority under 35 U.S.C. § 119(a |)-(d) or (f). | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority documen | its have been received. | | | | | |
| 2. Certified copies of the priority documen | | ion No | | | | |
| 3. Copies of the certified copies of the price | ority documents have been receive | ed in this National Stage | | | | |
| application from the International Burea | au (PCT Rule 17.2(a)). | | | | | |
| * See the attached detailed Office action for a lis | t of the certified copies not receive | ed. | | | | |
| | | | | | | |
| Attachment(s) | - | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary Paper No(s)/Mail D | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date | | Patent Application (PTO-152) | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-49 rejected under 35 U.S.C. 102(e) as being clearly anticipated by Jungreis et al. (6,369,461).

Jungreis et al. disclose a high efficiency power conditioner employing low voltage Dc bus and buck and boost converters in Figs. 1-3. A fuel cell – 10, battery – 22, controlling battery – 24, maintaining DC voltage – 12 and DC to AC inverter – 16.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5-7, 9-38 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Bet-Esh et al. (4,728,808).

Bet-Esh et al. disclose an uninterruptible power supply system in Figs. 3 and 4.

Voltage source - 6, battery – 26, controlling battery – 28, maintaining DC voltage – 12 and DC to AC inverter – 30. See Abstract lines 12-14 and Col. 2, line 54 to Col. 6, line 24.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 4, 8 and 39-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bet-Esh et al. (4,728,808) in view of Jungreis et al. (6,369,461).

Bet-Esh et al. disclose the claimed invention except for a fuel cell. Jungreis et al. teaches the use of a fuel cell as a voltage source in Fig.1. It would have been obvious to one having ordinary skill in the art at the time of the invention to provide a fuel cell as a voltage source as taught by Jungreis et al. in Bet-Esh et al. power supply system in order to provide a low voltage at high current.

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Response to Arguments

7. Applicant's arguments filed 3/18/04have been fully considered but they are not persuasive. Applicant argues that Jungreis et al. reference does not disclose the claimed invention. Applicant's attention is directed to Fig. 1, which shows a fuel cell – 10, battery – 22, controlling battery – 24, maintaining DC voltage – 12 and a DC to AC inverter - 16. The DC bus line has a low voltage that varies with the load but the boost converter –12 try to maintain constant dc voltage once it has determined the required voltage for the load. See Col. 2, line 52 to Col. 6, line 5 which states that the buck converter and boost converter draws the required balance of power from the battery to provide the required power, which implies a constant DC voltage as long as the load remains the same.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adolf Berhane whose telephone number is 571-272-2077. The examiner can normally be reached on Monday- Friday 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Adolf Berhane Primary Examiner Art Unit 2838 Page 5